

Claim Appendix

1. (Previously Presented) A method for paging a target mobile station (MS), the method comprising:

receiving information destined for the target MS;

paging the target MS at a paging area that is centered at a cell, in which the target MS last registered, and expands by a predefined number of cells around the cell; and

receiving registration from the MS when a number of cells identified in a first list is equal to a predetermined limit and the MS having moved the cells identified in the first list, other than a cell in which the MS last registered, to a second list.

2. (Original) The method of claim 1, further including sending the information to the target MS, if the target MS is located.

3. (Original) The method of claim 2, further including determining a neighboring base station controller (BSC) that can locate the target MS, if the target MS is not located.

4. (Original) The method of claim 3, further including sending the information to the neighboring BSC that locates the target MS for delivery to the target MS.

5. (Original) The method of claim 3, further including determining whether a mobile station controller (MSC) can locate the target MS, if no BSC connected to the MSC could locate the target MS.

6. (Original) The method of claim 5, further including sending the information to the MSC for delivery to the target MS, if the MSC locates the target MS.

7. (Previously Presented) A computer-readable medium comprising at least one instruction, which, when executed by a machine, cause the machine to perform operations for paging a target mobile station (MS), the instruction comprising:

a set of the instructions to receive information destined for the target MS;

a set of the instructions to page the target MS at a paging area that is centered at a cell, in which the target MS last registered, and expands by a predefined number of cells around the cell; and

a set of instructions to receive registration from the MS when a number of cells identified in a first list is equal to a predetermined limit and the MS having moved the cells identified in the first list, other than a cell in which the MS last registered, to a second list.

8. (Previously Presented) The computer-readable medium of claim 7, further comprising a set of instructions to send the information to the target MS, if the target MS is located.

9. (Previously Presented) The computer-readable medium of claim 8, further comprising a set of instructions to determine a neighboring base station controller (BSC) that can locate the target MS, if the target MS is not located.

10. (Previously Presented) The computer-readable medium of claim 9, further comprising a set of instructions to send the information to the neighboring BSC that locates the target MS for delivery to the target MS.

11. (Previously Presented) The computer-readable medium of claim 9, further comprising a set of instructions to determine whether a mobile station controller (MSC) can locate the target MS, if no BSC connected to the MSC could locate the target MS.

12. (Previously Presented) The computer-readable medium of claim 11, further comprising a set of instructions to send the information to the MSC for delivery to the target MS, if the MSC locates the target MS.

13. (Previously Presented) An apparatus for paging a target mobile station (MS), comprising:

means for receiving information destined for the target MS;

means for paging the target MS at a paging area that is centered at a cell, in which the target MS last registered, and expands by a predefined number of cells around the cell; and

means for receiving registration from the MS when a number of cells identified in a first list is equal to a predetermined limit and the MS having moved the cells identified in the first list, other than a cell in which the MS last registered, to a second list.

14. (Original) The apparatus of claim 13, further including means for sending the information to the target MS, if the target MS is located.

15. (Original) The apparatus of claim 14, further including means for determining a neighboring base station controller (BSC) that can locate the target MS, if the target MS is not located.

16. (Original) The apparatus of claim 15, further including means for sending the information to the neighboring BSC that locates the target MS for delivery to the target MS.

17. (Original) The apparatus of claim 15, further including means for determining whether a mobile station controller (MSC) can locate the target MS, if no BSC connected to the MSC could locate the target MS.

18. (Previously Presented) The apparatus of claim 17, further including means for sending the information to the MSC for delivery to the target MS, if the MSC locates the target MS.

19. (Previously Presented) A base station controller (BSC) for paging a target mobile station (MS), comprising:

- a receiver operable to receive information from a target MS;
- a transmitter operable to transmit information to the target MS; and
- a processor operable to:

- receive information destined for the target MS;
 - page the target MS at a paging area that is centered at a cell, in which the target MS last registered, and expands by a predefined number of cells around the cell;
 - and
 - receive registration from the MS when a number of cells identified in a first list is equal to a predetermined limit and the MS having moved the cells identified in the first list, other than a cell in which the MS last registered, to a second list.

20. (Previously Presented) The base station controller of claim 19, further operable to send information to the BSC for delivery to the target MS, if the BSC locates the target MS.

21. (Previously Presented) The base station controller of claim 20, further operable to determine a neighboring BSC that can locate the target MS, if the BSC could not locate the target MS.

22. (Previously Presented) The base station controller of claim 21, further operable to send information to the neighboring BSC that locates the target MS for delivery to the target MS.

23. (Previously Presented) The base station controller of claim 21, further operable to determine whether a mobile station controller (MSC) can locate the target MS, if no BSC connected to the MSC could locate the target MS.

24. (Previously Presented) The base station controller of claim 23, further operable to send information to the MSC for delivery to the target MS, if the MSC locates the target MS.